



Inventor: FREEDMAN et al
SN 09/437,450/Sheet 1 of 43
Atty. Dkt.: 1579-315

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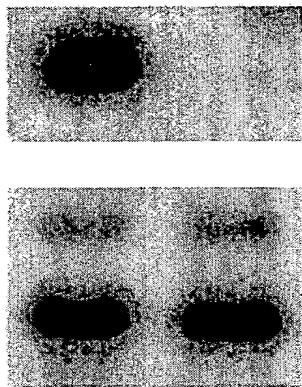


Fig. 1

BEST AVAILABLE COPY

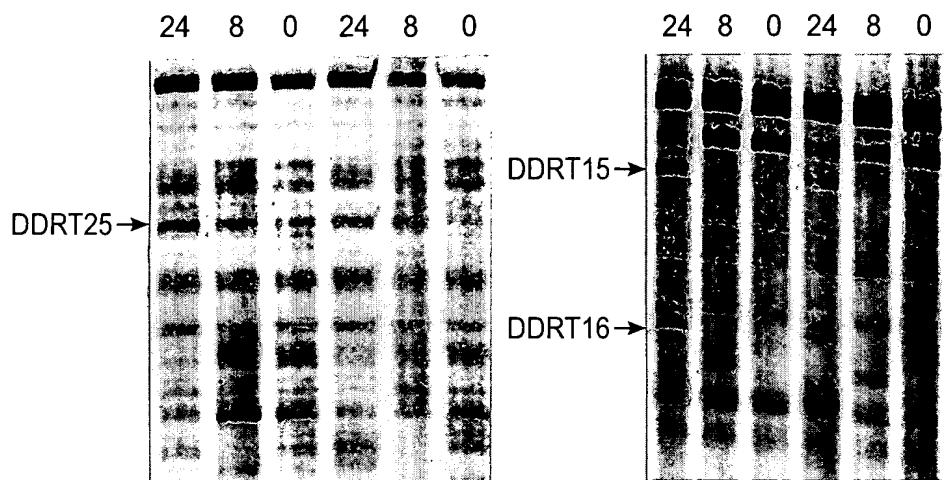
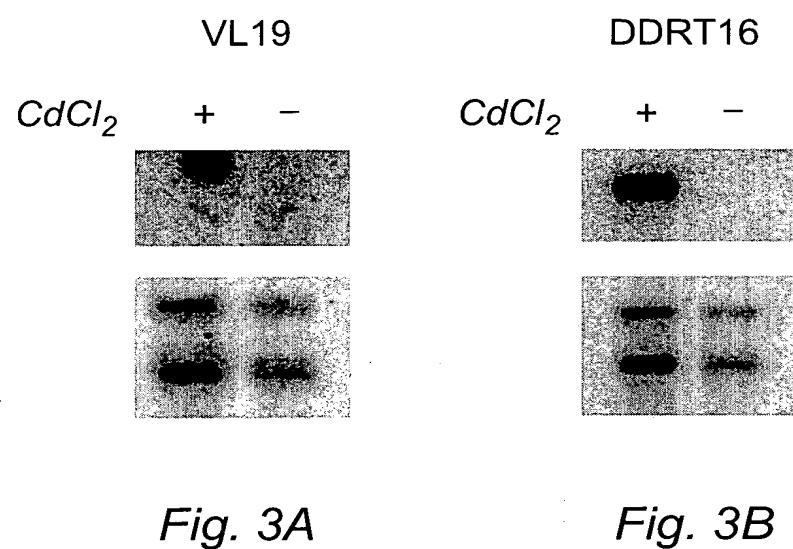


Fig. 2A

Fig. 2B



BEST AVAILABLE COPY

Fig. 4A

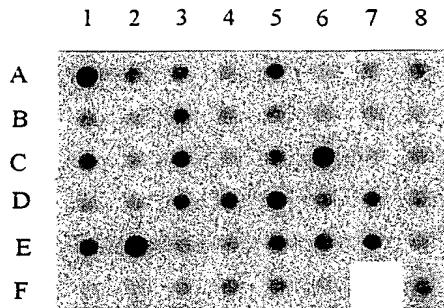


Fig. 4B

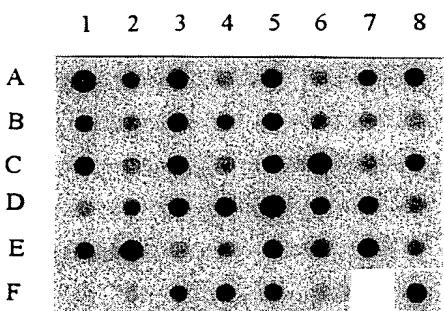
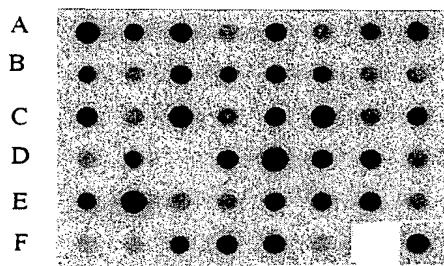


Fig. 4C



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Fig. 5A-1

LOCUS AF072438 284 bp mRNA EST 06-JUL-1998
DEFINITION AF072438 mRNA from cadmium-responsive gene *Caenorhabditis elegans*
cDNA clone DDRT21, mRNA sequence.
ACCESSION AF072438
NID g3288944
KEYWORDS EST.
SOURCE *Caenorhabditis elegans*.
ORGANISM *Caenorhabditis elegans*
Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida;
Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; *Caenorhabditis*.
REFERENCE 1 (bases 1 to 284)
AUTHORS Freedman,J.H. and Liao,H.-C.
TITLE Cadmium-Regulated Genes from the Nematode *Caenorhabditis elegans*.
Identification and cloning of new cadmium-responsive genes by
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JOURNAL Unpublished (1998)
COMMENT
Contact: Jonathan H. Freedman
Nicholas School of the Environment
Duke University
Box 90328, Durham, NC 27708-0328, USA
Email: jonf@duke.edu.
FEATURES Location/Qualifiers
source 1..284
/organism="Caenorhabditis elegans"
/strain="N2"
/db_xref="taxon:6239"
/clone="DDRT21"
/clone_lib="mRNA from cadmium-responsive gene"
/tissue_type="whole animal"
/dev_stage="mixed population"
BASE COUNT 88 a 61 c 54 g 81 t
ORIGIN
1 tggtaactcca cacggacaaa tacatttagt ttacaaggcc gccacgcgac acgcaacggc
61 cgtaaatcta cccaagggtac aacaacaaca tgtcaagcac agacccatat ttatggtg
121 cggaaaggatg gcctctactg tagtaatcgca caatttgact ttatccacc ggatcactta
181 acctattttg atattaatgc gcctgattgg ggatcacagg gtttgcggaa aaatgttaatt
241 atgaactgaa ttgaaatgtt atttataat tagttttat tggg
//

LOCUS AF072437 214 bp mRNA EST 06-JUL-1998
DEFINITION AF072437 mRNA from cadmium-responsive gene *Caenorhabditis elegans*
cDNA clone VL8, mRNA sequence.
ACCESSION AF072437
NID g3288943
KEYWORDS EST.
SOURCE *Caenorhabditis elegans*.
ORGANISM *Caenorhabditis elegans*
Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida;
Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; *Caenorhabditis*.
REFERENCE 1 (bases 1 to 214)
AUTHORS Freedman,J.H. and Liao,H.-C.
TITLE Cadmium-Regulated Genes from the Nematode *Caenorhabditis elegans*.
Identification and cloning of new cadmium-responsive genes by

Fig. 5A-2

differential display
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COMMENT
Contact: Jonathan H. Freedman
Nicholas School of the Environment
Duke University
Box 90328, Durham, NC 27708-0328, USA
Email: jonf@duke.edu.

FEATURES Location/Qualifiers

source 1..214
/organism="Caenorhabditis elegans"
/strain="N2"
/db_xref="taxon:6239"
/clone="VL8"
/clone_lib="mRNA from cadmium-responsive gene"
/tissue_type="whole animal"
/dev_stage="mixed population"

BASE COUNT 68 a 37 c 66 g 43 t

ORIGIN

1 gcaagtgcgg agacaaatgt gaatgcagtg gagacaagtg ttgtgagaag tactgctgtg
61 aggaggccag tgagaaaaaa tgctgtccag ctggatgtaa gggagactgc aagtgtgcaa
121 actgtcattg tgcagagcag aagcagtgcg agacaagacc catcaacacc agggaaactgc
181 tgcggctcat taaaatgttt cagagttgaa tcta

//

LOCUS AF072436 217 bp mRNA EST 06-JUL-1998
DEFINITION AF072436 mRNA from cadmium-responsive gene *Caenorhabditis elegans*
cDNA clone VL7, mRNA sequence.
ACCESSION AF072436
NID g3288942
KEYWORDS EST.
SOURCE *Caenorhabditis elegans*.
ORGANISM *Caenorhabditis elegans*
Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida;
Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; *Caenorhabditis*.
REFERENCE 1 (bases 1 to 217)
AUTHORS Freedman,J.H. and Liao,H.-C.
TITLE Cadmium-Regulated Genes from the Nematode *Caenorhabditis elegans*.
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Nicholas School of the Environment
Duke University
Box 90328, Durham, NC 27708-0328, USA
Email: jonf@duke.edu.

FEATURES Location/Qualifiers

source 1..217
/organism="Caenorhabditis elegans"
/strain="N2"
/db_xref="taxon:6239"
/clone="VL7"
/clone_lib="mRNA from cadmium-responsive gene"

Fig. 5A-3

/tissue_type="whole animal"
/dev_stage="mixed population"
BASE COUNT 69 a 37 c 66 g 45 t
ORIGIN
1 ttagcaagtgcggagacaaa tgtgaatgca gtggagacaa gtgttgtgag aagtactgct
61 gtgaggaggc cagtggaaaa aaatgctgtc cagctggatg taagggagac tgcaagtgtg
121 caaactgtca ttgtgcagag cagaaggcgt gcgagacaag acccatcaac accagggaac
181 tgctgcggct cattaaaatg ttccagagtt gaatcta
//
LOCUS AF072435 217 bp mRNA EST 06-JUL-1998
DEFINITION AF072435 mRNA from cadmium-responsive gene *Caenorhabditis elegans*
cDNA clone VL15, mRNA sequence.
ACCESSION AF072435
NID g3288941
KEYWORDS EST.
SOURCE *Caenorhabditis elegans*.
ORGANISM *Caenorhabditis elegans*
Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida;
Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; *Caenorhabditis*.
REFERENCE 1 (bases 1 to 217)
AUTHORS Freedman,J.H. and Liao,H.-C.
TITLE Cadmium-Regulated Genes from the Nematode *Caenorhabditis elegans*.
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Contact: Jonathan H. Freedman
Nicholas School of the Environment
Duke University
Box 90328, Durham, NC 27708-0328, USA
Email: jonf@duke.edu.
FEATURES Location/Qualifiers
source 1..217
/organism="Caenorhabditis elegans"
/strain="N2"
/db_xref="taxon:6239"
/clone="VL15"
/clone_lib="mRNA from cadmium-responsive gene"
/tissue_type="whole animal"
/dev_stage="mixed population"
BASE COUNT 69 a 37 c 66 g 45 t
ORIGIN
1 ttagcaagtgcggagacaaa tgtgaatgca gtggagacaa gtgttgtgag aagtactgct
61 gtgaggaggc cagtggaaaa aaatgctgtc cagctggatg taagggagac tgcaagtgtg
121 caaactgtca ttgtgcagag cagaaggcgt gcgagacaag acccatcaac accagggaac
181 tgctgcggct cattaaaatg ttccagagtt gaatcta
//
LOCUS AF072434 216 bp mRNA EST 06-JUL-1998
DEFINITION AF072434 mRNA from cadmium-responsive gene *Caenorhabditis elegans*
cDNA clone VL12, mRNA sequence.
ACCESSION AF072434
NID g3288940

Fig. 5A-4

KEYWORDS EST.

SOURCE *Caenorhabditis elegans*.

ORGANISM *Caenorhabditis elegans*

Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida;
Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; Caenorhabditis.

REFERENCE 1 (bases 1 to 216)

AUTHORS Freedman,J.H. and Liao,H.-C.

TITLE Cadmium-Regulated Genes from the Nematode *Caenorhabditis elegans*.

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COMMENT

Contact: Jonathan H. Freedman
Nicholas School of the Environment
Duke University
Box 90328, Durham, NC 27708-0328, USA
Email: jonf@duke.edu.

FEATURES Location/Qualifiers

source 1..216

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/strain="N2"
/db_xref="taxon:6239"
/clone="VL12"
/clone_lib="mRNA from cadmium-responsive gene"
/tissue_type="whole animal"
/dev_stage="mixed population"

BASE COUNT 69 a 37 c 66 g 44 t

ORIGIN

1 tagcaagtgc ggagacaaat gtgaatgcag tggagacaag tggatgtgaga agtactgctg
61 tggaggaggcc agtgagaaaa aatgctgtcc agctggatgt aaggggagact gcaagtgtgc
121 aactgtcat tggcagagc agaaggcgtg cgagacaaga cccatcaaca ccagggaact
181 gctgcggctc attaaaatgt ttcagagtg aatcta
//

LOCUS AF071399 240 bp mRNA EST 01-JUL-1998

DEFINITION AF071399 mRNA from cadmium-responsive gene *Caenorhabditis elegans*
cDNA clone DDRT9A, mRNA sequence.

ACCESSION AF071399

NID g3265144

KEYWORDS EST.

SOURCE *Caenorhabditis elegans*.

ORGANISM *Caenorhabditis elegans*

Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida;
Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; Caenorhabditis.

REFERENCE 1 (bases 1 to 240)

AUTHORS Freedman,J.H. and Liao,H.-C.

TITLE Cadmium-Regulated Genes from the Nematode *Caenorhabditis elegans*.
Identification and cloning of new cadmium-responsive genes by
differential display

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COMMENT

Contact: Jonathan H. Freedman
Nicholas School of the Environment
Duke University

Box 90328, Durham, NC 27708-0328, USA
Email: jonf@duke.edu.

Fig. 5A-5

FEATURES Location/Qualifiers
source 1..240
/organism="Caenorhabditis elegans"
/strain="N2"
/db_xref="taxon:6239"
/clone="DDRT9A"
/clone_lib="mRNA from cadmium-responsive gene"
/tissue_type="whole animal"
/dev_stage="mixed population"
BASE COUNT 81 a 28 c 41 g 90 t
ORIGIN
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61 ggaaggcctag aagagtgaaa attttaaaaa atgtgaggaa ctggttttgtt attcagaagc
121 atataaaacgt tgccttaattt tatatatgac gttctctatg aatatacgca aatgtatcg
181 tttttttat cccaaaatca aacatttttgc tatacgac ctgccttca cggagggtta
//
LOCUS AF071398 217 bp mRNA EST 01-JUL-1998
DEFINITION AF071398 mRNA from cadmium-responsive gene *Caenorhabditis elegans*
cDNA clone DDRT7, mRNA sequence.
ACCESSION AF071398
NID g3265143
KEYWORDS EST.
SOURCE *Caenorhabditis elegans*.
ORGANISM *Caenorhabditis elegans*
Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida;
Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; *Caenorhabditis*.
REFERENCE 1 (bases 1 to 217)
AUTHORS Freedman, J.H. and Liao, H.-C.
TITLE Cadmium-Regulated Genes from the Nematode *Caenorhabditis elegans*.
Identification and cloning of new cadmium-responsive genes by
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Contact: Jonathan H. Freedman
Nicholas School of the Environment
Duke University
Box 90328, Durham, NC 27708-0328, USA
Email: jonf@duke.edu.
FEATURES Location/Qualifiers
source 1..217
/organism="Caenorhabditis elegans"
/strain="N2"
/db_xref="taxon:6239"
/clone="DDRT7"
/clone_lib="mRNA from cadmium-responsive gene"
/tissue_type="whole animal"
/dev_stage="mixed population"
BASE COUNT 64 a 38 c 42 g 73 t
ORIGIN
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61 aactgtctat atcattccgc aatcacattt cggatgtctt cgaaaaggca ttccaaatgtt

Fig. 5A-6

121 attggagtca tgtgaaagag ttcgtcatga agtttaccca aaggcattc atagtgaatt
181 aaattgtcaa actagtagtc agatcaataa aattttc

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LOCUS AF071397 219 bp mRNA EST 01-JUL-1998
DEFINITION AF071397 mRNA from cadmium-responsive gene *Caenorhabditis elegans*

cDNA clone DDRT6, mRNA sequence.

ACCESSION AF071397

NID g3265142

KEYWORDS EST.

SOURCE *Caenorhabditis elegans*.

ORGANISM *Caenorhabditis elegans*

Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida;
Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; *Caenorhabditis*.

REFERENCE 1 (bases 1 to 219)

AUTHORS Freedman,J.H. and Liao,H.-C.

TITLE Cadmium-Regulated Genes from the Nematode *Caenorhabditis elegans*.

Identification and cloning of new cadmium-responsive genes by
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COMMENT

Contact: Jonathan H. Freedman
Nicholas School of the Environment
Duke University
Box 90328, Durham, NC 27708-0328, USA
Email: jonf@duke.edu.

FEATURES Location/Qualifiers

source 1..219

/organism="Caenorhabditis elegans"
/strain="N2"
/db_xref="taxon:6239"
/clone="DDRT6"
/clone_lib="mRNA from cadmium-responsive gene"
/tissue_type="whole animal"
/dev_stage="mixed population"

BASE COUNT 75 a 38 c 34 g 72 t

ORIGIN

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61 cccgtagcaa aaaaatacat gtcggggaaa tgagaaaaat ggttaataaa tttttaaaaa

121 aagtatataa ttccccaac aagctactgc atgtccttgt actacaatct tctccgacgg

181 attccactct cgatcgccga ttccgattct tcatgttgg

//

LOCUS AF071396 254 bp mRNA EST 01-JUL-1998

DEFINITION AF071396 mRNA from cadmium-responsive gene *Caenorhabditis elegans*
cDNA clone DDRT5, mRNA sequence.

ACCESSION AF071396

NID g3265141

KEYWORDS EST.

SOURCE *Caenorhabditis elegans*.

ORGANISM *Caenorhabditis elegans*

Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida;
Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; *Caenorhabditis*.

REFERENCE 1 (bases 1 to 254)

Fig. 5A-7

AUTHORS Freedman,J.H. and Liao,H.-C.

TITLE Cadmium-Regulated Genes from the Nematode *Caenorhabditis elegans*.

Identification and cloning of new cadmium-responsive genes by
differential display

JOURNAL Unpublished (1998)

COMMENT

Contact: Jonathan H. Freedman
Nicholas School of the Environment
Duke University
Box 90328, Durham, NC 27708-0328, USA
Email: jonf@duke.edu.

FEATURES Location/Qualifiers

source 1..254
/organism="Caenorhabditis elegans"
/strain="N2"
/db_xref="taxon:6239"
/clone="DDRT5"
/clone_lib="mRNA from cadmium-responsive gene"
/tissue_type="whole animal"
/dev_stage="mixed population"

BASE COUNT 79 a 43 c 50 g 82 t

ORIGIN

1 tttttttttt tttttgccccca tcggaaaata gcaaggctct ccacaggtaa agtaatttgag
61 catttggatg atgccttc acagcattat ccagtgtata ctatccctt ttcgtaagag
121 tttcgaaaaaa atgtccataa aaagtgtta atgactttt ttcatctcgaa agcatacata
181 cgatcgaaac ggagaaaatcg atagatcgaa tcaggataag tggggataact gtattgtcgg
241 atgaaaaacat agac

//

LOCUS AF071394 165 bp mRNA EST 01-JUL-1998

DEFINITION AF071394 mRNA from cadmium-responsive gene *Caenorhabditis elegans*
cDNA clone DDRT47, mRNA sequence.

ACCESSION AF071394

NID g3265139

KEYWORDS EST.

SOURCE *Caenorhabditis elegans*.

ORGANISM *Caenorhabditis elegans*

Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida;
Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; *Caenorhabditis*.

REFERENCE 1 (bases 1 to 165)

AUTHORS Freedman,J.H. and Liao,H.-C.

TITLE Cadmium-Regulated Genes from the Nematode *Caenorhabditis elegans*.

Identification and cloning of new cadmium-responsive genes by
differential display

JOURNAL Unpublished (1998)

COMMENT

Contact: Jonathan H. Freedman
Nicholas School of the Environment
Duke University
Box 90328, Durham, NC 27708-0328, USA
Email: jonf@duke.edu.

FEATURES Location/Qualifiers

source 1..165
/organism="Caenorhabditis elegans"

Fig. 5A-8

/strain="N2"
/db_xref="taxon:6239"
/clone="DDRT47"
/clone_lib="mRNA from cadmium-responsive gene"
/tissue_type="whole animal"
/dev_stage="mixed population"
BASE COUNT 38 a 37 c 20 g 70 t
ORIGIN
1 tttttttttt ttttccaacc cttcacata ataggcgaa aaccgattgt tgctgttact
61 tggatgtgc gggtgttact gccaagtctg gtcgtatag aaaacatcg gcgatcatgc
121 acctgaaaac gagtttttg aatacttgat acatttgct tcata
//
LOCUS AF071393 154 bp mRNA EST 01-JUL-1998
DEFINITION AF071393 mRNA from cadmium-responsive gene *Caenorhabditis elegans*
cDNA clone DDRT41, mRNA sequence.
ACCESSION AF071393
NID g3265138
KEYWORDS EST.
SOURCE *Caenorhabditis elegans*.
ORGANISM *Caenorhabditis elegans*
Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida;
Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; *Caenorhabditis*.
REFERENCE 1 (bases 1 to 154)
AUTHORS Freedman,J.H. and Liao,H.-C.
TITLE Cadmium-Regulated Genes from the Nematode *Caenorhabditis elegans*.
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differential display
JOURNAL Unpublished (1998)
COMMENT
Contact: Jonathan H. Freedman
Nicholas School of the Environment
Duke University
Box 90328, Durham, NC 27708-0328, USA
Email: jnf@duke.edu.
FEATURES Location/Qualifiers
source 1..154
/organism="Caenorhabditis elegans"
/strain="N2"
/db_xref="taxon:6239"
/clone="DDRT41"
/clone_lib="mRNA from cadmium-responsive gene"
/tissue_type="whole animal"
/dev_stage="mixed population"
BASE COUNT 49 a 27 c 40 g 38 t
ORIGIN
1 tggatgtgc gggtgttact gccaagtctg gtcgtatag aaaacatcg gcgatcatgc
61 ctttacgtgg taagatctg aacgtcgaaa agcaatggaa cataagatct acgaaaatga
121 ggagatcaa aacaatgtta cagcttggt ccta
//
LOCUS AF071392 264 bp mRNA EST 01-JUL-1998
DEFINITION AF071392 mRNA from cadmium-responsive gene *Caenorhabditis elegans*
cDNA clone DDRT40, mRNA sequence.

Fig. 5A-9

ACCESSION AF071392
NID g3265137
KEYWORDS EST.
SOURCE *Caenorhabditis elegans*.
ORGANISM *Caenorhabditis elegans*
Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida;
Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; *Caenorhabditis*.
REFERENCE 1 (bases 1 to 264)
AUTHORS Freedman,J.H. and Liao,H.-C.
TITLE Cadmium-Regulated Genes from the Nematode *Caenorhabditis elegans*.
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JOURNAL Unpublished (1998)

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Contact: Jonathan H. Freedman
Nicholas School of the Environment
Duke University
Box 90328, Durham, NC 27708-0328, USA
Email: jonf@duke.edu.

FEATURES Location/Qualifiers

source 1..264
/organism="Caenorhabditis elegans"
/strain="N2"
/db_xref="taxon:6239"
/clone="DDRT40"
/clone_lib="mRNA from cadmium-responsive gene"
/tissue_type="whole animal"
/dev_stage="mixed population"

BASE COUNT 90 a 47 c 59 g 68 t

ORIGIN

1 tggattgtgc ggagtataag caaaaatttc tggaaaagtc gggtgatatg aagtttgata
61 agatctcaa tcaaaagctc gtttctgt tttaaaaga ttccgcaggaa aatgtctcc
121 gagagtccgt gcctcaaat taaattctac gaggcgatca aagaatacga gaaaatggag
181 acaccagatg agcgattAAC aaaagcacga gaaatttac gatcatcata tacggttgaa
241 tccgtcgcg caatcgac actc

//

LOCUS AF071391 187 bp mRNA EST 01-JUL-1998
DEFINITION AF071391 mRNA from cadmium-responsive gene *Caenorhabditis elegans*
cDNA clone DDRT4, mRNA sequence.
ACCESSION AF071391
NID g3265136
KEYWORDS EST.
SOURCE *Caenorhabditis elegans*.
ORGANISM *Caenorhabditis elegans*
Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida;
Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; *Caenorhabditis*.
REFERENCE 1 (bases 1 to 187)
AUTHORS Freedman,J.H. and Liao,H.-C.
TITLE Cadmium-Regulated Genes from the Nematode *Caenorhabditis elegans*.
Identification and cloning of new cadmium-responsive genes by
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JOURNAL Unpublished (1998)
COMMENT

Fig. 5A-10

Contact: Jonathan H. Freedman
Nicholas School of the Environment
Duke University
Box 90328, Durham, NC 27708-0328, USA
Email: jonf@duke.edu.

FEATURES Location/Qualifiers

source 1..187
/organism="Caenorhabditis elegans"
/strain="N2"
/db_xref="taxon:6239"
/clone="DDRT4"
/clone_lib="mRNA from cadmium-responsive gene"
/tissue_type="whole animal"
/dev_stage="mixed population"

BASE COUNT 57 a 22 c 41 g 67 t

ORIGIN

1 aaattttat taaaataaaa taaacatgtt ttgttgata ttatagcggtt aaagctgaaa
61 tgacaatgt tagaaaaacca gcagagaata gagatgttgcgtt gttgtttcca
121 gtgaacactt gttgcgggtgg agcccgatt tagcgagtgg tagttttga tgtgattgg
181 tccaaatc

//

LOCUS AF071389 267 bp mRNA EST 01-JUL-1998

DEFINITION AF071389 mRNA from cadmium-responsive gene *Caenorhabditis elegans*
cDNA clone DDRT37, mRNA sequence.

ACCESSION AF071389

NID g3265134

KEYWORDS EST.

SOURCE *Caenorhabditis elegans*.

ORGANISM *Caenorhabditis elegans*

Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida;
Rhabditina; Rhabditioidea; Rhabditidae; Peloderinae; *Caenorhabditis*.

REFERENCE 1 (bases 1 to 267)

AUTHORS Freedman, J.H. and Liao, H.-C.

TITLE Cadmium-Regulated Genes from the Nematode *Caenorhabditis elegans*.
Identification and cloning of new cadmium-responsive genes by
differential display

JOURNAL Unpublished (1998)

COMMENT

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Nicholas School of the Environment
Duke University
Box 90328, Durham, NC 27708-0328, USA
Email: jonf@duke.edu.

FEATURES Location/Qualifiers

source 1..267
/organism="Caenorhabditis elegans"
/strain="N2"
/db_xref="taxon:6239"
/clone="DDRT37"
/clone_lib="mRNA from cadmium-responsive gene"
/tissue_type="whole animal"
/dev_stage="mixed population"

BASE COUNT 66 a 75 c 54 g 72 t

Fig. 5A-11

ORIGIN

1 tggtaactcca cctacaagg tt cttacaagg ttc tacgagggttgc tcctgatcga tccatccac
61 aaggctatcc gtcgttaaccc agacacccaa tggatccca agccttagttc acaaggcaccg
121 tgagcaaaaga ggactcacct ctgctggacg caagttcggtg gactcgaaa gggattgtt
181 ttctctgctt ccccgaggatccaacac caaaggttt ccacccgcca accgataaat
241 ctgttattt tattttttt tggttt
//

LOCUS AF071388 292 bp mRNA EST 01-JUL-1998
DEFINITION AF071388 mRNA from cadmium-responsive gene *Caenorhabditis elegans*
cDNA clone DDRT36, mRNA sequence.

ACCESSION AF071388

NID g3265133

KEYWORDS EST.

SOURCE *Caenorhabditis elegans*.

ORGANISM *Caenorhabditis elegans*

Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida;
Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; *Caenorhabditis*.

REFERENCE 1 (bases 1 to 292)

AUTHORS Freedman, J.H. and Liao, H.-C.

TITLE Cadmium-Regulated Genes from the Nematode *Caenorhabditis elegans*.
Identification and cloning of new cadmium-responsive genes by
differential display

JOURNAL Unpublished (1998)

COMMENT

Contact: Jonathan H. Freedman
Nicholas School of the Environment
Duke University
Box 90328, Durham, NC 27708-0328, USA
Email: jonf@duke.edu.

FEATURES Location/Qualifiers

source 1..292
/organism="Caenorhabditis elegans"
/strain="N2"
/db_xref="taxon:6239"
/clone="DDRT36"
/clone_lib="mRNA from cadmium-responsive gene"
/tissue_type="whole animal"
/dev_stage="mixed population"

BASE COUNT 73 a 57 c 51 g 111 t

ORIGIN

1 tttttttttt ttttcccaac cccttcacat aaaggcgaaa aaccgattgt tgctgttact
61 tgggtttgtc gtttattccc tgaggatcc atattccgt tctcccaatc tctaaagata
121 tacctgaaaaa cgagggtgtcg tcgaaaatact tgatacatgt tgcttcatc ctgggtatg
181 ttgttcgca aattttcat actagttatg ataggatttg aatgagctgg cacgagtcaa
241 ctgtgaactc gaatttcaat atttcgtga tccgttattt aatgtatgtaa
//

LOCUS AF071387 314 bp mRNA EST 01-JUL-1998
DEFINITION AF071387 mRNA from cadmium-responsive gene *Caenorhabditis elegans*
cDNA clone DDRT35, mRNA sequence.

ACCESSION AF071387

NID g3265132

KEYWORDS EST.

Fig. 5A-12

SOURCE *Caenorhabditis elegans*.
ORGANISM *Caenorhabditis elegans*
Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida;
Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; *Caenorhabditis*.
REFERENCE 1 (bases 1 to 314)
AUTHORS Freedman,J.H. and Liao,H.-C.
TITLE Cadmium-Regulated Genes from the Nematode *Caenorhabditis elegans*.
Identification and cloning of new cadmium-responsive genes by
differential display
JOURNAL Unpublished (1998)
COMMENT
Contact: Jonathan H. Freedman
Nicholas School of the Environment
Duke University
Box 90328, Durham, NC 27708-0328, USA
Email: jonf@duke.edu.
FEATURES Location/Qualifiers
source 1..314
/organism="Caenorhabditis elegans"
/strain="N2"
/db_xref="taxon:6239"
/clone="DDRT35"
/clone_lib="mRNA from cadmium-responsive gene"
/tissue_type="whole animal"
/dev_stage="mixed population"
BASE COUNT 86 a 65 c 56 g 107 t
ORIGIN
1 tctgagctag gaggtccagg aggaaacaac ggaggaggtg ctggaaatgg tggattcgac
61 gatttgatg attggctcg ccgttcgaa gaactgaaaa agattaagta atcatcaccc
121 gacgttccat tccttataa ctatgttt ctcttccacc caatttttt tcacgtgtc
181 ttttttgta tcataaatga gacccccaaa aactagctgt ttcttagtgc atacgtaaa
241 acccccttag tcattgatta tcattgtata cctcattatc cgaaaaacct ttgcacattc
301 atcaactagg tttt
//
LOCUS AF071386 189 bp mRNA EST 01-JUL-1998
DEFINITION AF071386 mRNA from cadmium-responsive gene *Caenorhabditis elegans*
cDNA clone DDRT34, mRNA sequence.
ACCESSION AF071386
NID g3265131
KEYWORDS EST.
SOURCE *Caenorhabditis elegans*.
ORGANISM *Caenorhabditis elegans*
Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida;
Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; *Caenorhabditis*.
REFERENCE 1 (bases 1 to 189)
AUTHORS Freedman,J.H. and Liao,H.-C.
TITLE Cadmium-Regulated Genes from the Nematode *Caenorhabditis elegans*.
Identification and cloning of new cadmium-responsive genes by
differential display
JOURNAL Unpublished (1998)
COMMENT
Contact: Jonathan H. Freedman
Nicholas School of the Environment

Fig. 5A-13

Duke University
Box 90328, Durham, NC 27708-0328, USA
Email: jonf@duke.edu.

FEATURES Location/Qualifiers
source 1..189
/organism="Caenorhabditis elegans"
/strain="N2"
/db_xref="taxon:6239"
/clone="DDRT34"
/clone_lib="mRNA from cadmium-responsive gene"
/tissue_type="whole animal"
/dev_stage="mixed population"

BASE COUNT 61 a 26 c 48 g 54 t

ORIGIN

1 tctgagctag ggaccgaaat tcacaaatat ccaattgtta ctggatggtg gggatgtgga
61 cgatttaatg gggacaagcc actgaagtgt atgttatttc attcgtaaa tatgaagatg
121 gaggagatgt aatggggatt ttgccttt tgcaaatgg cttccatgt tacctgaaaa
181 aaaaaaaaaa

//

LOCUS AF071385 171 bp mRNA EST 01-JUL-1998

DEFINITION AF071385 mRNA from cadmium-responsive gene *Caenorhabditis elegans*
cDNA clone DDRT33D, mRNA sequence.

ACCESSION AF071385

NID g3265130

KEYWORDS EST.

SOURCE *Caenorhabditis elegans*.

ORGANISM *Caenorhabditis elegans*

Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida;
Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; *Caenorhabditis*.

REFERENCE 1 (bases 1 to 171)

AUTHORS Freedman,J.H. and Liao,H.-C.

TITLE Cadmium-Regulated Genes from the Nematode *Caenorhabditis elegans*.
Identification and cloning of new cadmium-responsive genes by
differential display

JOURNAL Unpublished (1998)

COMMENT

Contact: Jonathan H. Freedman
Nicholas School of the Environment
Duke University
Box 90328, Durham, NC 27708-0328, USA
Email: jonf@duke.edu.

FEATURES Location/Qualifiers

source 1..171
/organism="Caenorhabditis elegans"
/strain="N2"
/db_xref="taxon:6239"
/clone="DDRT33D"
/clone_lib="mRNA from cadmium-responsive gene"
/tissue_type="whole animal"
/dev_stage="mixed population"

BASE COUNT 57 a 44 c 37 g 33 t

ORIGIN

1 tctgagctag gaaaggacgg agaagatgga gagaacggag ctgctggagc cgctggacca

Fig. 5A-14

61 aaggatctt gcgaccactg cccaccacca cgcactcccc aggatattaa ttcaacttctc
121 tctaattta gtgaatctca ttctaataaa aagccgcccc aaaaaaaaaa a
//

LOCUS AF071383 289 bp mRNA EST 01-JUL-1998
DEFINITION AF071383 mRNA from cadmium-responsive gene *Caenorhabditis elegans*
cDNA clone DDRT30, mRNA sequence.
ACCESSION AF071383
NID g3265128
KEYWORDS EST.
SOURCE *Caenorhabditis elegans*.
ORGANISM *Caenorhabditis elegans*
Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida;
Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; *Caenorhabditis*.
REFERENCE 1 (bases 1 to 289)
AUTHORS Freedman,J.H. and Liao,H.-C.
TITLE Cadmium-Regulated Genes from the Nematode *Caenorhabditis elegans*.
Identification and cloning of new cadmium-responsive genes by
differential display
JOURNAL Unpublished (1998)
COMMENT
Contact: Jonathan H. Freedman
Nicholas School of the Environment
Duke University
Box 90328, Durham, NC 27708-0328, USA
Email: jonf@duke.edu.
FEATURES Location/Qualifiers
source 1..289
/organism="Caenorhabditis elegans"
/strain="N2"
/db_xref="taxon:6239"
/clone="DDRT30"
/clone_lib="mRNA from cadmium-responsive gene"
/tissue_type="whole animal"
/dev_stage="mixed population"
BASE COUNT 68 a 64 c 63 g 94 t
ORIGIN
1 tttttttt tttagcgag cgtttattat tttagtcgag cttgggttga gtcgtcagct
61 gaacatgaag attgacaaag aagacgtatca gcagcaacag atgcgcagag tcgcatttt
121 tgcgttgcgt gtctcaactg cagccgtcat ttcaagcatc gtgactctcc caatgtatca
181 ctcttactct tcaatcttc caatccatt tgcattatgg aaaccggagtt ctgtaaaact
241 gtgctcgtga tatgtggtgt cgaagttctc cacaagtctc ggttaccct
//

LOCUS AF071382 162 bp mRNA EST 01-JUL-1998
DEFINITION AF071382 mRNA from cadmium-responsive gene *Caenorhabditis elegans*
cDNA clone DDRT3, mRNA sequence.
ACCESSION AF071382
NID g3265127
KEYWORDS EST.
SOURCE *Caenorhabditis elegans*.
ORGANISM *Caenorhabditis elegans*
Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida;
Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; *Caenorhabditis*.

REFERENCE 1 (bases 1 to 162)

AUTHORS Freedman,J.H. and Liao,H.-C.

TITLE Cadmium-Regulated Genes from the Nematode *Caenorhabditis elegans*.
Identification and cloning of new cadmium-responsive genes by
differential display

JOURNAL Unpublished (1998)

COMMENT

Contact: Jonathan H. Freedman
Nicholas School of the Environment
Duke University
Box 90328, Durham, NC 27708-0328, USA
Email: jonf@duke.edu.

FEATURES Location/Qualifiers

source 1..162
/organism="Caenorhabditis elegans"
/strain="N2"
/db_xref="taxon:6239"
/clone="DDRT3"
/clone_lib="mRNA from cadmium-responsive gene"
/tissue_type="whole animal"
/dev_stage="mixed population"

BASE COUNT 64 a 31 c 18 g 49 t

ORIGIN

1 ctccaccgca acaagtgtc acgtggaaac aacaacgaaa ggaacatcat ctctatct
61 gctggtttc taatcatgt catttcagct ttaacgctat aatcaacaaa aacagttat
121 ttattttaa taaaattta ttctgtgcaaa aaaaaaaaaa aa

//

LOCUS AF071381 140 bp mRNA EST 01-JUL-1998

DEFINITION AF071381 mRNA from cadmium-responsive gene *Caenorhabditis elegans*
cDNA clone DDRT29, mRNA sequence.

ACCESSION AF071381

NID g3265126

KEYWORDS EST.

SOURCE *Caenorhabditis elegans*.

ORGANISM *Caenorhabditis elegans*

Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida;
Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; *Caenorhabditis*.

REFERENCE 1 (bases 1 to 140)

AUTHORS Freedman,J.H. and Liao,H.-C.

TITLE Cadmium-Regulated Genes from the Nematode *Caenorhabditis elegans*.
Identification and cloning of new cadmium-responsive genes by
differential display

JOURNAL Unpublished (1998)

COMMENT

Contact: Jonathan H. Freedman
Nicholas School of the Environment
Duke University
Box 90328, Durham, NC 27708-0328, USA
Email: jonf@duke.edu.

FEATURES Location/Qualifiers

source 1..140
/organism="Caenorhabditis elegans"
/strain="N2"

Fig. 5A-16

/db_xref="taxon:6239"
/clone="DDRT29"
/clone_lib="mRNA from cadmium-responsive gene"
/tissue_type="whole animal"
/dev_stage="mixed population"
BASE COUNT 52 a 25 c 29 g 34 t
ORIGIN
1 tagggctgg ttgtgacaat gtgcactaaa atggggcatg aatatcacca gcagagttca
61 ctacccaaa gtgtacttat taagagtcaa ctgtgaagta tatgagacat ttcatgtgcc
121 tgcccaaaaa aaaaaaaaaa
//
LOCUS AF071380 308 bp mRNA EST 01-JUL-1998
DEFINITION AF071380 mRNA from cadmium-responsive gene *Caenorhabditis elegans*
cDNA clone DDRT28, mRNA sequence.
ACCESSION AF071380
NID g3265125
KEYWORDS EST.
SOURCE *Caenorhabditis elegans*.
ORGANISM *Caenorhabditis elegans*
Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida;
Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; *Caenorhabditis*.
REFERENCE 1 (bases 1 to 308)
AUTHORS Freedman,J.H. and Liao,H.-C.
TITLE Cadmium-Regulated Genes from the Nematode *Caenorhabditis elegans*.
Identification and cloning of new cadmium-responsive genes by
differential display
JOURNAL Unpublished (1998)
COMMENT
Contact: Jonathan H. Freedman
Nicholas School of the Environment
Duke University
Box 90328, Durham, NC 27708-0328, USA
Email: jonf@duke.edu.
FEATURES Location/Qualifiers
source 1..308
/organism="Caenorhabditis elegans"
/strain="N2"
/db_xref="taxon:6239"
/clone="DDRT28"
/clone_lib="mRNA from cadmium-responsive gene"
/tissue_type="whole animal"
/dev_stage="mixed population"
BASE COUNT 88 a 70 c 73 g 77 t
ORIGIN
1 tagttaggca caggatgtac gaggaaatc tactatttc gggcttcacc acgaaatcac
61 aataacccgg atttttagt ggtccccgca cgttgaccta ctggcgctc aggcaactccg
121 cccgcacatt cggcgacacg cctacaatcc acgtgtcaat cgtcagattt gcggtatcaat
181 aatggtgatg aaaggtggaa atacgtatataat ggtatcatgtt caaaggcatc aagctgaaca
241 attcgaagag ttgaatcgcc gtcgacacatt ttgatccaag accgtaaagaa atttggaaagc
301 tattggtg
//
LOCUS AF071379 238 bp mRNA EST 01-JUL-1998

Fig. 5A-17

DEFINITION AF071379 mRNA from cadmium-responsive gene *Caenorhabditis elegans*
cDNA clone DDRT26, mRNA sequence.

ACCESSION AF071379

NID g3265124

KEYWORDS EST.

SOURCE *Caenorhabditis elegans*.

ORGANISM *Caenorhabditis elegans*

Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida;
Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; *Caenorhabditis*.

REFERENCE 1 (bases 1 to 238)

AUTHORS Freedman,J.H. and Liao,H.-C.

TITLE Cadmium-Regulated Genes from the Nematode *Caenorhabditis elegans*.

Identification and cloning of new cadmium-responsive genes by
differential display

JOURNAL Unpublished (1998)

COMMENT

Contact: Jonathan H. Freedman

Nicholas School of the Environment

Duke University

Box 90328, Durham, NC 27708-0328, USA

Email: jonf@duke.edu.

FEATURES Location/Qualifiers

source 1..238

/organism="Caenorhabditis elegans"

/strain="N2"

/db_xref="taxon:6239"

/clone="DDRT26"

/clone_lib="mRNA from cadmium-responsive gene"

/tissue_type="whole animal"

/dev_stage="mixed population"

BASE COUNT 74 a 43 c 44 g 77 t

ORIGIN

1 tttttttt ttttggggag gaaatcacgg ctccggatgc aacagtcttc tctcaattgg

61 caactgtcta ttatccattc cgcaatcaca ttccggatgt tctcgaaaag gacttccaa

121 agttatggaa gtactgtgaa agagtcgtc atgaagttt cccaaaggac ttactatgt

181 gaattaaattt gtcaaacttag tagtcagatc aataaaattt tccgcgcgaa aaaaaaaaa

//

LOCUS AF071378 324 bp mRNA EST 01-JUL-1998

DEFINITION AF071378 mRNA from cadmium-responsive gene *Caenorhabditis elegans*
cDNA clone DDRT25A, mRNA sequence.

ACCESSION AF071378

NID g3265123

KEYWORDS EST.

SOURCE *Caenorhabditis elegans*.

ORGANISM *Caenorhabditis elegans*

Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida;
Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; *Caenorhabditis*.

REFERENCE 1 (bases 1 to 324)

AUTHORS Freedman,J.H. and Liao,H.-C.

TITLE Cadmium-Regulated Genes from the Nematode *Caenorhabditis elegans*.

Identification and cloning of new cadmium-responsive genes by
differential display

JOURNAL Unpublished (1998)

Fig. 5A-18

COMMENT

Contact: Jonathan H. Freedman
Nicholas School of the Environment
Duke University
Box 90328, Durham, NC 27708-0328, USA
Email: jonf@duke.edu.

FEATURES Location/Qualifiers

source 1..324
/organism="Caenorhabditis elegans"
/strain="N2"
/db_xref="taxon:6239"
/clone="DDRT25A"
/clone_lib="mRNA from cadmium-responsive gene"
/tissue_type="whole animal"
/dev_stage="mixed population"

BASE COUNT 102 a 70 c 73 g 79 t

ORIGIN

1 tagttaggca caggatgtac gaggaaattc tactatttc gggtctcacc acgaaatcac
61 aataacccgg atttttagt ggccccgcga cggtgaccta cttggcgcgt caggcactcc
121 gccgcgacat tcgcccacac gcctacaatc cacgtgtcaa tcgtcagatt tgccggatcaa
181 taatggtgat gaaagggtgaa aatacgtaa tggatcatgt tcaaaggcat caagctgaac
241 aattcgaaga gttgaatcg cgtcgacaac ttttgatcc aagaccgtaa gaaatttgaa
301 agctattggtaaaaaaaa aaaa

//

LOCUS AF071377 272 bp mRNA EST 01-JUL-1998

DEFINITION AF071377 mRNA from cadmium-responsive gene *Caenorhabditis elegans*
cDNA clone DDRT24, mRNA sequence.

ACCESSION AF071377

NID g3265122

KEYWORDS EST.

SOURCE *Caenorhabditis elegans*.

ORGANISM *Caenorhabditis elegans*

Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida;
Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; *Caenorhabditis*.

REFERENCE 1 (bases 1 to 272)

AUTHORS Freedman,J.H. and Liao,H.-C.

TITLE Cadmium-Regulated Genes from the Nematode *Caenorhabditis elegans*.

Identification and cloning of new cadmium-responsive genes by
differential display

JOURNAL Unpublished (1998)

COMMENT

Contact: Jonathan H. Freedman
Nicholas School of the Environment
Duke University
Box 90328, Durham, NC 27708-0328, USA
Email: jonf@duke.edu.

FEATURES Location/Qualifiers

source 1..272
/organism="Caenorhabditis elegans"
/strain="N2"
/db_xref="taxon:6239"
/clone="DDRT24"
/clone_lib="mRNA from cadmium-responsive gene"

Fig. 5A-19

/tissue_type="whole animal"
/dev_stage="mixed population"
BASE COUNT 91 a 74 c 51 g 56 t
ORIGIN
1 tggtaactcca cgccagaaaga agaaggcat ccacaacacc gctactaccg atgacaagaa
61 gcttcaaaagc aatttgaaga aactctctgt caccaacatt ccaggaatcg aggaggtcaa
121 catgattaag acgatggAAC cgttatccac ttcaacaacc caaaagtcta aacctctgtt
181 cccagccaat accttctctg tcacaggatc agccgataac aagttagatc actgaaatgt
241 ctcccaggaa atgctgaact ggtcagatc ct
//

LOCUS AF071395 218 bp rRNA INV 30-JUN-1998
DEFINITION *Caenorhabditis elegans* strain N2 clone DDRT48, rRNA sequence.
ACCESSION AF071395
NID g3265140
KEYWORDS
SOURCE *Caenorhabditis elegans*.
ORGANISM *Caenorhabditis elegans*
Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida;
Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; *Caenorhabditis*.
REFERENCE 1 (bases 1 to 218)
AUTHORS Freedman,J.H. and Liao,H.-C.
TITLE Cadmium-Regulated Genes from the Nematode *Caenorhabditis elegans*.
Identification and cloning of new cadmium-responsive genes by
differential display
JOURNAL Unpublished
REFERENCE 2 (bases 1 to 218)
AUTHORS Freedman,J.H. and Liao,H.-C.
TITLE Direct Submission
JOURNAL Submitted (09-JUN-1998) Nicholas School of the Environment, Duke
University, Box 90328, Durham, NC 27708-0328, USA
FEATURES Location/Qualifiers
source 1..218
/organism="Caenorhabditis elegans"
/strain="N2"
/db_xref="taxon:6239"
/tissue_type="whole animal"
/dev_stage="mixed population"
/note="from cadmium-responsive gene"
/clone="DDRT48"
misc_RNA 1..218
/note="similar to *Caenorhabditis elegans* rDNA tandem
repeats"
BASE COUNT 58 a 58 c 38 g 64 t
ORIGIN
1 tttttttttt ttgcacaag cggggactaa aagcaagctt ttcatccacc gatgatacaa
61 ggcgtttta gtaccttagg atcgactgac ccacatccaa ctactgtcc acgtggaaacc
121 ctctccact tcagtcctca aggatcgaac ttgaatattt gctactacca tacgatctgc
181 actgacggaa agtccagccg agcctaccc atagttaa
//

LOCUS AF071390 238 bp rRNA INV 30-JUN-1998
DEFINITION *Caenorhabditis elegans* strain N2 clone DDRT38, rRNA sequence.
ACCESSION AF071390

TITLE Direct Submission
JOURNAL Submitted (09-JUN-1998) Nicholas School of the Environment, Duke University, Box 90328, Durham, NC 27708-0328, USA
FEATURES Location/Qualifiers
source 1..253
/organism="Caenorhabditis elegans"
/strain="N2"
/db_xref="taxon:6239"
/tissue_type="whole animal"
/dev_stage="mixed population"
/note="from cadmium-responsive gene"
/clone="DDRT32"
misc_RNA 1..253
/note="similar to Caenorhabditis elegans rDNA tandem repeats"
BASE COUNT 45 a 60 c 69 g 79 t
ORIGIN
1 tagggcctgt tgggtgatgc ttgtccggcg cagttctgtc tgcttgatac ttgggttga
61 tggcggacta gtgattgtgc ttcttgcgga ccgttctgg tgggtgcttg gacctcggtt
121 ctatgtatccat gatcgctcat ctatcaaccg tactgttaacc ggtacgactc agggaatccg
181 actgtctaattaaacacagag gtgacagatg gtccttgcgg acgttaactg tcactgttt
241 ctccccagtg cac
//
LOCUS AF071376 277 bp rRNA **INV** 30-JUN-1998
DEFINITION Caenorhabditis elegans strain N2 clone DDRT23, rRNA sequence.
ACCESSION AF071376
NID g3265121
KEYWORDS
SOURCE Caenorhabditis elegans.
ORGANISM Caenorhabditis elegans
Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida;
Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; Caenorhabditis.
REFERENCE 1 (bases 1 to 277)
AUTHORS Freedman,J.H. and Liao,H.-C.
TITLE Cadmium-Regulated Genes from the Nematode Caenorhabditis elegans.
Identification and cloning of new cadmium-responsive genes by
differential display
JOURNAL Unpublished
REFERENCE 2 (bases 1 to 277)
AUTHORS Freedman,J.H. and Liao,H.-C.
TITLE Direct Submission
JOURNAL Submitted (09-JUN-1998) Nicholas School of the Environment, Duke University, Box 90328, Durham, NC 27708-0328, USA
FEATURES Location/Qualifiers
source 1..277
/organism="Caenorhabditis elegans"
/strain="N2"
/db_xref="taxon:6239"
/tissue_type="whole animal"
/dev_stage="mixed population"
/note="from cadmium-responsive gene"
/clone="DDRT23"
misc_RNA 1..277

Fig. 5A-22

/note="similar to *Caenorhabditis elegans* rDNA tandem repeats"

BASE COUNT 67 a 59 c 73 g 78 t
ORIGIN

1 tttttttt ttggggggg gcggtgtta caaagggcag ggacgtaatc aacgtgagct
61 gatgactcac acttcttaggc attcctcggt taagggaaata attacaatac ccatcccgga
121 catggaaaga ttcaacgggt ttaccgatac cctttcggca acacgggaaa actcacccgg
181 tccggacacc attaggactg acagattgaa agctttctcgattttgt gttgggttgt
241 catggccgtt ctttagtttgtt ggagttaccaa tcactag

//

LOCUS AF071375 216 bp mRNA EST 30-JUN-1998

DEFINITION AF071375 mRNA from cadmium-responsive gene *Caenorhabditis elegans* cDNA clone VL5, mRNA sequence.

ACCESSION AF071375

NID g3265120

KEYWORDS EST.

SOURCE *Caenorhabditis elegans*.

ORGANISM *Caenorhabditis elegans*

Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida; Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; *Caenorhabditis*.

REFERENCE 1 (bases 1 to 216)

AUTHORS Freedman,J.H. and Liao,H.-C.

TITLE Cadmium-Regulated Genes from the Nematode *Caenorhabditis elegans*.

Identification and cloning of new cadmium-responsive genes by differential display

JOURNAL Unpublished (1998)

COMMENT

Contact: Jonathan H. Freedman
Nicholas School of the Environment
Duke University
Box 90328, Durham, NC 27708-0328, USA
Email: jonf@duke.edu.

FEATURES Location/Qualifiers

source 1..216

/organism="Caenorhabditis elegans"
/strain="N2"
/db_xref="taxon:6239"
/clone="VL5"
/clone_lib="mRNA from cadmium-responsive gene"
/tissue_type="whole animal"
/dev_stage="mixed population"

BASE COUNT 69 a 37 c 66 g 44 t

ORIGIN

1 tagcaagtgc ggagacaaat gtgaatgcag tggagacaag tgggtgaga agtactgctg
61 tgaggaggcc agtgagaaaa aatgctgtcc agctggatgt aagggagact gcaagtgtgc
121 aaactgtcat tggcagagc agaaggactg cgagacaaga cccatcaaca ccagggact
181 gctgcggctc attaaaatgt tttagatgtt aatcta

//

LOCUS AF071374 356 bp mRNA EST 30-JUN-1998

DEFINITION AF071374 mRNA from cadmium-responsive gene *Caenorhabditis elegans* cDNA clone VL9, mRNA sequence.

ACCESSION AF071374

Fig. 5A-23

NID g3265119
KEYWORDS EST.
SOURCE *Caenorhabditis elegans*.
ORGANISM *Caenorhabditis elegans*
Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida;
Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; *Caenorhabditis*.
REFERENCE 1 (bases 1 to 356)
AUTHORS Freedman,J.H. and Liao,H.-C.
TITLE Cadmium-Regulated Genes from the Nematode *Caenorhabditis elegans*.
Identification and cloning of new cadmium-responsive genes by
differential display
JOURNAL Unpublished (1998)

COMMENT

Contact: Jonathan H. Freedman
Nicholas School of the Environment
Duke University
Box 90328, Durham, NC 27708-0328, USA
Email: jonf@duke.edu.

FEATURES Location/Qualifiers

source 1..356
/organism="Caenorhabditis elegans"
/strain="N2"
/db_xref="taxon:6239"
/clone="VL9"
/clone_lib="mRNA from cadmium-responsive gene"
/tissue_type="whole animal"
/dev_stage="mixed population"

BASE COUNT 126 a 70 c 55 g 105 t

ORIGIN

1 caatcgatga gtatcctcgta caaattaatg catgatgcaat ttggaaatat tccgaggtag
61 gtaaaacggg gaacatcagc agatagatga atacagcgga tatcatatag gcacgcagaa
121 tatcaataaa atttcaaat ttcaaaataa tcataacgtataacacgt agcaggaaat
181 tttaaagcca ctgaaaataaa tatagaataa tatatacaga cacacacaat ctgatttca
241 gaacatttc agtaacgacg ttgaactt ttgaagatt tcgcccggcc ttgtatca
301 ttgcagtc caacttccac aactttctt tccctccctt cctctacatc gattgc
//

LOCUS AF071373 199 bp mRNA EST 30-JUN-1998

DEFINITION AF071373 mRNA from cadmium-responsive gene *Caenorhabditis elegans*
cDNA clone VL3A, mRNA sequence.

ACCESSION AF071373

NID g3265118

KEYWORDS EST.

SOURCE *Caenorhabditis elegans*.

ORGANISM *Caenorhabditis elegans*

Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida;
Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; *Caenorhabditis*.

REFERENCE 1 (bases 1 to 199)

AUTHORS Freedman,J.H. and Liao,H.-C.

TITLE Cadmium-Regulated Genes from the Nematode *Caenorhabditis elegans*.
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differential display

JOURNAL Unpublished (1998)

COMMENT

Fig. 5A-24

Contact: Jonathan H. Freedman
Nicholas School of the Environment
Duke University
Box 90328, Durham, NC 27708-0328, USA
Email: jonf@duke.edu.

FEATURES Location/Qualifiers

source 1..199

/organism="Caenorhabditis elegans"
/strain="N2"
/db_xref="taxon:6239"
/clone="VL3A"
/clone_lib="mRNA from cadmium-responsive gene"
/tissue_type="whole animal"
/dev_stage="mixed population"

BASE COUNT 55 a 31 c 20 g 93 t

ORIGIN

1 taaactctat gtttatttgtt ttttcaaat ttcaaattga aaattgaaac ttcaatttg
61 attagagtc ttgtggtttg actcctttt ttcattgaac atctttacg tacgtcatac
121 ttttgataac acatttacaa atgttgtttt gtaattatat gtaacaaatt tctatgtaca
181 cctcatctca tctctctat

//

LOCUS AF071372 326 bp mRNA EST 30-JUN-1998
DEFINITION AF071372 mRNA from cadmium-responsive gene *Caenorhabditis elegans*
cDNA clone VL21A, mRNA sequence.
ACCESSION AF071372
NID g3265117
KEYWORDS EST.
SOURCE *Caenorhabditis elegans*.
ORGANISM *Caenorhabditis elegans*
Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida;
Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; *Caenorhabditis*.
REFERENCE 1 (bases 1 to 326)
AUTHORS Freedman,J.H. and Liao,H.-C.
TITLE Cadmium-Regulated Genes from the Nematode *Caenorhabditis elegans*.
Identification and cloning of new cadmium-responsive genes by
differential display
JOURNAL Unpublished (1998)

COMMENT

Contact: Jonathan H. Freedman
Nicholas School of the Environment
Duke University
Box 90328, Durham, NC 27708-0328, USA
Email: jonf@duke.edu.

FEATURES Location/Qualifiers

source 1..326

/organism="Caenorhabditis elegans"
/strain="N2"
/db_xref="taxon:6239"
/clone="VL21A"
/clone_lib="mRNA from cadmium-responsive gene"
/tissue_type="whole animal"
/dev_stage="mixed population"

BASE COUNT 76 a 61 c 59 g 130 t

Fig. 5A-25

ORIGIN

1 cgtctccctt tttacttac ttgttaggtgc gtcgtgtcaa ttgtacgtac ttatatttag
61 caaacctctg tggttaccc tcgtttttt taaaatttt tacacactt cttttggca
121 gtaaaagtgt ttagcacac ttaaacactc tgccactacc aaggtaatag tgagcccatc
181 gaggttttat aatgtccctt gatagttaa agtgttggag gatcgagcta ctttggtatgt
241 gggaaagccgt gtttctgtc ttgtttttt cgatgattt cccaaactatt tgatatttg
301 atttaccgga ttatataata cacc

//

LOCUS AF071371 147 bp mRNA EST 30-JUN-1998

DEFINITION AF071371 mRNA from cadmium-responsive gene *Caenorhabditis elegans*
cDNA clone VL20B, mRNA sequence.

ACCESSION AF071371

NID g3265116

KEYWORDS EST.

SOURCE *Caenorhabditis elegans*.

ORGANISM *Caenorhabditis elegans*

Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida;
Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; *Caenorhabditis*.

REFERENCE 1 (bases 1 to 147)

AUTHORS Freedman,J.H. and Liao,H.-C.

TITLE Cadmium-Regulated Genes from the Nematode *Caenorhabditis elegans*.

Identification and cloning of new cadmium-responsive genes by
differential display

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COMMENT

Contact: Jonathan H. Freedman
Nicholas School of the Environment
Duke University
Box 90328, Durham, NC 27708-0328, USA
Email: jonf@duke.edu.

FEATURES Location/Qualifiers

source 1..147
/organism="Caenorhabditis elegans"
/strain="N2"
/db_xref="taxon:6239"
/clone="VL20B"
/clone_lib="mRNA from cadmium-responsive gene"
/tissue_type="whole animal"
/dev_stage="mixed population"

BASE COUNT 54 a 27 c 22 g 44 t

ORIGIN

1 tgccaatata cctagaaaga gtaaatatta tgacgtggca ataatacaga agcagtcgaa
61 actacaactc acgaaacatt ttgaaagttt acctcttgat ttctttgaa tgttttgtct
121 cacacaataa agaaaattctt accgtac

//

LOCUS AF071370 285 bp mRNA EST 30-JUN-1998

DEFINITION AF071370 mRNA from cadmium-responsive gene *Caenorhabditis elegans*
cDNA clone VL19, mRNA sequence.

ACCESSION AF071370

NID g3265115

KEYWORDS EST.

SOURCE *Caenorhabditis elegans*.

Fig. 5A-26

ORGANISM *Caenorhabditis elegans*
Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida;
Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; *Caenorhabditis*.
REFERENCE 1 (bases 1 to 285)
AUTHORS Freedman,J.H. and Liao,H.-C.
TITLE Cadmium-Regulated Genes from the Nematode *Caenorhabditis elegans*.
Identification and cloning of new cadmium-responsive genes by
differential display
JOURNAL Unpublished (1998)
COMMENT
Contact: Jonathan H. Freedman
Nicholas School of the Environment
Duke University
Box 90328, Durham, NC 27708-0328, USA
Email: jonf@duke.edu.
FEATURES Location/Qualifiers
source 1..285
/organism="Caenorhabditis elegans"
/strain="N2"
/db_xref="taxon:6239"
/clone="VL19"
/clone_lib="mRNA from cadmium-responsive gene"
/tissue_type="whole animal"
/dev_stage="mixed population"
BASE COUNT 91 a 46 c 52 g 96 t
ORIGIN
1 cgtggcaata cacagaatat acacatttgag atggttcgaa tggcaaagag aagggtgg
61 ctaatcattc tatatacgac aacccaaat ataatttcga tggcgaa ttgtgtatgg
121 tgaatggaa taacaaaatt ttcttaacgt ctccattccg agtaattttt cgttttccct
181 ccactttcg atttatattg ttttcttaga aaaagtattt attgcatcg gggttcattt
241 tctttgtta gaatataaac tcgttcactt cccaaaaaaa aaaaa
//
LOCUS AF071369 216 bp mRNA EST 30-JUN-1998
DEFINITION AF071369 mRNA from cadmium-responsive gene *Caenorhabditis elegans*
cDNA clone VL13, mRNA sequence.
ACCESSION AF071369
NID g3265114
KEYWORDS EST.
SOURCE *Caenorhabditis elegans*.
ORGANISM *Caenorhabditis elegans*
Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida;
Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; *Caenorhabditis*.
REFERENCE 1 (bases 1 to 216)
AUTHORS Freedman,J.H. and Liao,H.-C.
TITLE Cadmium-Regulated Genes from the Nematode *Caenorhabditis elegans*.
Identification and cloning of new cadmium-responsive genes by
differential display
JOURNAL Unpublished (1998)
COMMENT
Contact: Jonathan H. Freedman
Nicholas School of the Environment
Duke University
Box 90328, Durham, NC 27708-0328, USA

Fig. 5A-27

Email: jonf@duke.edu.

FEATURES Location/Qualifiers

source 1..216
/organism="Caenorhabditis elegans"
/strain="N2"
/db_xref="taxon:6239"
/clone="VL13"
/clone_lib="mRNA from cadmium-responsive gene"
/tissue_type="whole animal"
/dev_stage="mixed population"

BASE COUNT 69 a 37 c 66 g 44 t

ORIGIN

1 tagcaagtgc gagacaaatg tgaatgcagt ggagacaagt gttgtgagaa gtactgctgt
61 gaggaggcca gtgagaaaaa atgcgtcca gctggatgtt agggagactg caagtgtca
121 aactgtcatt gtgcagagca gaagcagtgc ggagacaaga cccatcaaca ccagggact
181 gctgcggctc attaaatgt ttccagatgtt aatcta

//

LOCUS AF071368 142 bp mRNA EST 30-JUN-1998

DEFINITION AF071368 mRNA from cadmium-responsive gene *Caenorhabditis elegans*
cDNA clone VL11, mRNA sequence.

ACCESSION AF071368

NID g3265113

KEYWORDS EST.

SOURCE *Caenorhabditis elegans*.

ORGANISM *Caenorhabditis elegans*
Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida;
Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; *Caenorhabditis*.

REFERENCE 1 (bases 1 to 142)

AUTHORS Freedman,J.H. and Liao,H.-C.

TITLE Cadmium-Regulated Genes from the Nematode *Caenorhabditis elegans*.
Identification and cloning of new cadmium-responsive genes by
differential display

JOURNAL Unpublished (1998)

COMMENT

Contact: Jonathan H. Freedman
Nicholas School of the Environment
Duke University
Box 90328, Durham, NC 27708-0328, USA
Email: jonf@duke.edu.

FEATURES Location/Qualifiers

source 1..142
/organism="Caenorhabditis elegans"
/strain="N2"
/db_xref="taxon:6239"
/clone="VL11"
/clone_lib="mRNA from cadmium-responsive gene"
/tissue_type="whole animal"
/dev_stage="mixed population"

BASE COUNT 45 a 21 c 23 g 53 t

ORIGIN

1 gtgcgtggagt tgggttatt tcagaataaa taaaataaaa tatgatttga gtggaaatatt
61 aaaataaaatgtt cttcacatt aaattatcaa ttgcgtggcc tcgaatatct tccagcttgt
121 gatgcattc gttcattcct tc

Fig. 5A-28

//

LOCUS AF071367 84 bp mRNA EST 30-JUN-1998
DEFINITION AF071367 mRNA from cadmium-responsive gene *Caenorhabditis elegans*
cDNA clone VL10, mRNA sequence.
ACCESSION AF071367
NID g3265112
KEYWORDS EST.
SOURCE *Caenorhabditis elegans*.
ORGANISM *Caenorhabditis elegans*
Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida;
Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; *Caenorhabditis*.
REFERENCE 1 (bases 1 to 84)
AUTHORS Freedman,J.H. and Liao,H.-C.
TITLE Cadmium-Regulated Genes from the Nematode *Caenorhabditis elegans*.
Identification and cloning of new cadmium-responsive genes by
differential display
JOURNAL Unpublished (1998)
COMMENT
Contact: Jonathan H. Freedman
Nicholas School of the Environment
Duke University
Box 90328, Durham, NC 27708-0328, USA
Email: jonf@duke.edu.
FEATURES Location/Qualifiers
source 1..84
/organism="Caenorhabditis elegans"
/strain="N2"
/db_xref="taxon:6239"
/clone="VL10"
/clone_lib="mRNA from cadmium-responsive gene"
/tissue_type="whole animal"
/dev_stage="mixed population"
BASE COUNT 29 a 10 c 27 g 18 t
ORIGIN
1 tagcaagtgc ggagacaaat gtgaatgcag tggagacaag ttttgatgaga agtactgctg
61 tgaggattcc agtgagaaaa aatc
//

LOCUS AF071366 217 bp mRNA EST 30-JUN-1998
DEFINITION AF071366 mRNA from cadmium-responsive gene *Caenorhabditis elegans*
cDNA clone VL1, mRNA sequence.
ACCESSION AF071366
NID g3265111
KEYWORDS EST.
SOURCE *Caenorhabditis elegans*.
ORGANISM *Caenorhabditis elegans*
Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida;
Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; *Caenorhabditis*.
REFERENCE 1 (bases 1 to 217)
AUTHORS Freedman,J.H. and Liao,H.-C.
TITLE Cadmium-Regulated Genes from the Nematode *Caenorhabditis elegans*.
Identification and cloning of new cadmium-responsive genes by
differential display

Fig. 5A-29

JOURNAL Unpublished (1998)

COMMENT

Contact: Jonathan H. Freedman
Nicholas School of the Environment
Duke University
Box 90328, Durham, NC 27708-0328, USA
Email: jonf@duke.edu.

FEATURES Location/Qualifiers

source 1..217
/organism="Caenorhabditis elegans"
/strain="N2"
/db_xref="taxon:6239"
/clone="VLI"
/clone_lib="mRNA from cadmium-responsive gene"
/tissue_type="whole animal"
/dev_stage="mixed population"

BASE COUNT 69 a 37 c 67 g 44 t

ORIGIN

1 tagacaagtgc ggagacaaaat gtgaatgcag tggagacaag tggatgtgaga agtactgctg
61 tgaggaggcc agtgagaaaa aatgctgtcc agctggatgt aagggagact gcaagtgtgc
121 aaactgtcat tggcagacg agaaggcgtg cggagacaag acccatcaac accagggaac
181 tgctgcggct cattaaaatg tttcagatgt gaatcta

//

LOCUS AF071365 292 bp mRNA EST 30-JUN-1998

DEFINITION AF071365 mRNA from cadmium-responsive gene *Caenorhabditis elegans*
cDNA clone DDRT22, mRNA sequence.

ACCESSION AF071365

NID g3265110

KEYWORDS EST.

SOURCE *Caenorhabditis elegans*.

ORGANISM *Caenorhabditis elegans*

Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida;
Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; *Caenorhabditis*.

REFERENCE 1 (bases 1 to 292)

AUTHORS Freedman, J.H. and Liao, H.-C.

TITLE Cadmium-Regulated Genes from the Nematode *Caenorhabditis elegans*.
Identification and cloning of new cadmium-responsive genes by
differential display

JOURNAL Unpublished (1998)

COMMENT

Contact: Jonathan H. Freedman
Nicholas School of the Environment
Duke University
Box 90328, Durham, NC 27708-0328, USA
Email: jonf@duke.edu.

FEATURES Location/Qualifiers

source 1..292
/organism="Caenorhabditis elegans"
/strain="N2"
/db_xref="taxon:6239"
/clone="DDRT22"
/clone_lib="mRNA from cadmium-responsive gene"
/tissue_type="whole animal"

Fig. 5A-30

Fig. 5A-31

KEYWORDS EST.

SOURCE *Caenorhabditis elegans*.

ORGANISM *Caenorhabditis elegans*

Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida;
Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; Caenorhabditis.

REFERENCE 1 (bases 1 to 289)

AUTHORS Freedman, J.H. and Liao, H.-C.

TITLE Cadmium-Regulated Genes from the Nematode *Caenorhabditis elegans*.
Identification and cloning of new cadmium-responsive genes by
differential display

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COMMENT

Contact: Jonathan H. Freedman
Nicholas School of the Environment
Duke University
Box 90328, Durham, NC 27708-0328, USA
Email: jonf@duke.edu.

FEATURES Location/Qualifiers

source 1..289

/organism="Caenorhabditis elegans"
/strain="N2"
/db_xref="taxon:6239"
/clone="DDRT20"
/clone_lib="mRNA from cadmium-responsive gene"
/tissue_type="whole animal"
/dev_stage="mixed population"

BASE COUNT 63 a 56 c 75 g 95 t

ORIGIN

1 ttttttttttttttacat tatggcaaat ggaggcactg tctgggtccg tggggtcatg
61 gtgcatttggaa tcatggata tcctatccctg gcttctaattt ccaatgcgtt tacagtcatg
121 tggccttggaa cgggccttagc tgagcttggaa caaagttccct tgacagttacg ggtcgacaag
181 cttagacagtc agaaaatttggg cacttgggg ctacaggtgc tcgttaattttttttagagatg
241 ctgggcttcc ggacttttac taggctaattttaa taagacaact gggctctaa

//

LOCUS AF071362 214 bp mRNA EST 30-JUN-1998

DEFINITION AF071362 mRNA from cadmium-responsive gene *Caenorhabditis elegans*
cDNA clone DDRT2, mRNA sequence.

ACCESSION AF071362

NID g3265107

KEYWORDS EST.

SOURCE *Caenorhabditis elegans*.

ORGANISM *Caenorhabditis elegans*

Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida;
Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; Caenorhabditis.

REFERENCE 1 (bases 1 to 214)

AUTHORS Freedman, J.H. and Liao, H.-C.

TITLE Cadmium-Regulated Genes from the Nematode *Caenorhabditis elegans*.
Identification and cloning of new cadmium-responsive genes by
differential display

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COMMENT

Contact: Jonathan H. Freedman
Nicholas School of the Environment

Duke University
Box 90328, Durham, NC 27708-0328, USA
Email: jonf@duke.edu.

FEATURES Location/Qualifiers

source 1..214

/organism="Caenorhabditis elegans"
/strain="N2"
/db_xref="taxon:6239"
/clone="DDRT2"
/clone_lib="mRNA from cadmium-responsive gene"
/tissue_type="whole animal"
/dev_stage="mixed population"

BASE COUNT 77 a 37 c 40 g 60 t

ORIGIN

1 aaatcatggc ggccggatgca acagtcitct caattggcaa ctgtctatat cattccgcaa
61 cacatttcgg atgttctcgaa aaggacttc ccaaaggat tggaggactg tgaaagagtt
121 cgtcatgaaat ttcccaaag gactttacta tgtaattaa attgtcaaac tagtagtcag
181 atcaataaaaa tttagtgg aaaaaaaaaaaa aaaa

//

LOCUS AF071361 322 bp mRNA EST 30-JUN-1998

DEFINITION AF071361 mRNA from cadmium-responsive gene *Caenorhabditis elegans* cDNA clone DDRT19, mRNA sequence.

ACCESSION AF071361

NID g3265106

KEYWORDS EST.

SOURCE *Caenorhabditis elegans*.

ORGANISM *Caenorhabditis elegans*

Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida; Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; *Caenorhabditis*.

REFERENCE 1 (bases 1 to 322)

AUTHORS Freedman, J.H. and Liao, H.-C.

TITLE Cadmium-Regulated Genes from the Nematode *Caenorhabditis elegans*.
Identification and cloning of new cadmium-responsive genes by differential display

JOURNAL Unpublished (1998)

COMMENT

Contact: Jonathan H. Freedman
Nicholas School of the Environment
Duke University
Box 90328, Durham, NC 27708-0328, USA
Email: jonf@duke.edu.

FEATURES Location/Qualifiers

source 1..322

/organism="Caenorhabditis elegans"
/strain="N2"
/db_xref="taxon:6239"
/clone="DDRT19"
/clone_lib="mRNA from cadmium-responsive gene"
/tissue_type="whole animal"
/dev_stage="mixed population"

BASE COUNT 102 a 77 c 70 g 73 t

ORIGIN

1 taggtgaccg tagagaagcc cagatattta aaatctaaag ggaaactgtt tgaccagaag

Fig. 5A-32

Fig. 5A-33

61 attagagccc agttgtctta gatagccctag taaaagtccg gaagcccaga actctcaaaa
121 taattacgag caccgttagc ccacaagtgc ctaattctg actgtcaagc ttgtcgaccc
181 gtactgtcaa ggaactttgt caagctcagc taggcccgtt caagcccaca tgactgtaaa
241 cgattcggga ttagaagcca ggtataggata tccatgatcc aatgcaccaat gaccacgga
301 accagatgtg ctcattacat ag

//

LOCUS AF071360 228 bp mRNA EST 30-JUN-1998
DEFINITION AF071360 mRNA from cadmium-responsive gene *Caenorhabditis elegans*
cDNA clone DDRT18, mRNA sequence.

ACCESSION AF071360

NID g3265105

KEYWORDS EST.

SOURCE *Caenorhabditis elegans*.

ORGANISM *Caenorhabditis elegans*

Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida;
Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; *Caenorhabditis*.

REFERENCE 1 (bases 1 to 228)

AUTHORS Freedman,J.H. and Liao,H.-C.

TITLE Cadmium-Regulated Genes from the Nematode *Caenorhabditis elegans*.

Identification and cloning of new cadmium-responsive genes by
differential display

JOURNAL Unpublished (1998)

COMMENT

Contact: Jonathan H. Freedman
Nicholas School of the Environment
Duke University
Box 90328, Durham, NC 27708-0328, USA
Email: jonf@duke.edu.

FEATURES Location/Qualifiers

source 1..228

/organism="Caenorhabditis elegans"
/strain="N2"
/db_xref="taxon:6239"
/clone="DDRT18"
/clone_lib="mRNA from cadmium-responsive gene"
/tissue_type="whole animal"
/dev_stage="mixed population"

BASE COUNT 70 a 49 c 20 g 89 t

ORIGIN

1 tttttttttt ttccccatt catcacacac tatcatgttt tatattcaga cctattacct

61 gtccagaaaa actgagctga aaaaatcccg gacgagcagc tccttcacat tcaaaatctt

121 ccatcattc cccactcaat tcatttgttt tgctttgat ttcaaaattt ttgccttat

181 tattttatgt ctaaattaag aaaactgtta ctttgcaaaa aaaaaaaaaa

//

LOCUS AF071359 255 bp mRNA EST 30-JUN-1998

DEFINITION AF071359 mRNA from cadmium-responsive gene *Caenorhabditis elegans*
cDNA clone DDRT1, mRNA sequence.

ACCESSION AF071359

NID g3265104

KEYWORDS EST.

SOURCE *Caenorhabditis elegans*.

ORGANISM *Caenorhabditis elegans*

Fig. 5A-34

Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida; Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; Caenorhabditis.

REFERENCE 1 (bases 1 to 255)

AUTHORS Freedman,J.H. and Liao,H.-C.

TITLE Cadmium-Regulated Genes from the Nematode *Caenorhabditis elegans*.
Identification and cloning of new cadmium-responsive genes by differential display

JOURNAL Unpublished (1998)

COMMENT

Contact: Jonathan H. Freedman
Nicholas School of the Environment
Duke University
Box 90328, Durham, NC 27708-0328, USA
Email: jonf@duke.edu.

FEATURES Location/Qualifiers

source 1.255
/organism="Caenorhabditis elegans"
/strain="N2"
/db_xref="taxon:6239"
/clone="DDRT1"
/clone_lib="mRNA from cadmium-responsive gene"
/tissue_type="whole animal"
/dev_stage="mixed population"

BASE COUNT 113 a 25 c 51 g 66 t

ORIGIN

1 atcattcaag aaagcttata tcagaaaaca taaatgacat agatcaagtg taaatcacat
61 atatataaag tggataaata tatatagtta aacggataag gaaattaatt aatgaatttt
121 gaaactggca gcgaaggatg aacaggaaaa ggcacatgtt aaaaataatg aatgtgtata
181 attcgtgaa gagttgtta tgtaggtga tggcagccat gcagaatgag ccattgtcc
241 gaaaaaaaaaaaa

//

LOCUS AF071358 433 bp mRNA EST 30-JUN-1998

DEFINITION AF071358 mRNA from cadmium-responsive gene *Caenorhabditis elegans* cDNA clone DDRT17, mRNA sequence.

ACCESSION AF071358

NID g3265103

KEYWORDS EST.

SOURCE *Caenorhabditis elegans*.

ORGANISM *Caenorhabditis elegans*

Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida; Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; Caenorhabditis.

REFERENCE 1 (bases 1 to 433)

AUTHORS Freedman,J.H. and Liao,H.-C.

TITLE Cadmium-Regulated Genes from the Nematode *Caenorhabditis elegans*.
Identification and cloning of new cadmium-responsive genes by differential display

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COMMENT

Contact: Jonathan H. Freedman
Nicholas School of the Environment
Duke University
Box 90328, Durham, NC 27708-0328, USA
Email: jonf@duke.edu.

Fig. 5A-35

FEATURES Location/Qualifiers
source 1..433
/organism="Caenorhabditis elegans"
/strain="N2"
/db_xref="taxon:6239"
/clone="DDRT17"
/clone_lib="mRNA from cadmium-responsive gene"
/tissue_type="whole animal"
/dev_stage="mixed population"
BASE COUNT 149 a 63 c 83 g 138 t
ORIGIN
1 tggtaactaag ggccaataac tgagctttg cacggcggca tcaatgataa agagaaaacta
61 tttttacgg taaaataac caaatttaca ccggcgagtc aatcaaaaat ttcatctgg
121 aacagcaaag tacatcgag aattgcttgc aggaagcaact gatgaaacta aattaactgc
181 tggatgcata gggaaaaacgt caagattgc gtggagttgg agagaaggac tatgtttgga
241 tggtaactaa gattttgtaa ctggtgacaa taaggacatc acctttctaa ctaacttaaa
301 ttcctttta ctctttct tctgaattaa ttgtttta aggcgaattc tatgtttcag
361 aatttattta cgtttgcctt ttcatgttta attgtaaaag taagcaattt ttccaccgtt
421 aaaaaaaaaaaa aaa
//
LOCUS AF071357 933 bp mRNA EST 30-JUN-1998
DEFINITION AF071357 mRNA from cadmium-responsive gene *Caenorhabditis elegans*
cDNA clone DDRT16FC, mRNA sequence.
ACCESSION AF071357
NID g3265102
KEYWORDS EST.
SOURCE *Caenorhabditis elegans*.
ORGANISM *Caenorhabditis elegans*
Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida;
Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; *Caenorhabditis*.
REFERENCE 1 (bases 1 to 933)
AUTHORS Freedman,J.H. and Liao,H.-C.
TITLE Cadmium-Regulated Genes from the Nematode *Caenorhabditis elegans*.
Identification and cloning of new cadmium-responsive genes by
differential display
JOURNAL Unpublished (1998)
COMMENT
Contact: Jonathan H. Freedman
Nicholas School of the Environment
Duke University
Box 90328, Durham, NC 27708-0328, USA
Email: jnf@duke.edu.
FEATURES Location/Qualifiers
source 1..933
/organism="Caenorhabditis elegans"
/strain="N2"
/db_xref="taxon:6239"
/clone="DDRT16FC"
/clone_lib="mRNA from cadmium-responsive gene"
/tissue_type="whole animal"
/dev_stage="mixed population"
BASE COUNT 275 a 190 c 171 g 297 t
ORIGIN

Fig. 5A-36

1 catgcattt tttttttt tttttttt ctgtctcaag tatgtggat tcatgttga
61 ttattactgc tgcgctgtt ggagccgctg tcatttactt gaaaaatttc ttcaactgttc
121 ctagcattaa accaaaacct gatattcaca aaaaagacta caaaaaggat gtatgtatc
181 tgtatcagat gaagagactc aagaactgtc cgaactgtc cccttctgc ataaaaatcg
241 agattcttg tagaatcttc aagatccctt acgagattt cacatgacc tctgaacgt
301 ctccgaatgg attggccct ttcgttgaac tcaatggaga gcacattgtc gatctgatc
361 ttatcgaat ggcgttggaa tcacattttt aattccgtc gcttccaact gagctggaaa
421 ctcaatctgt tgctctaagc aagtttgcag atcaccattt gttctcgta cttagatc
481 ttaaaatgc tgcgacgaa ttctacaaa ccattatcgaa aataatcggt ctcccaaccc
541 tcctgaattt cctctcaatg ccccttttga aggctataat cgggaaaaat gtctacaaca
601 aatgtcaggg agccattggaa gattttgaat tgagtggatc cgacgagattt ctccacagag
661 atttgcgaat cgttagagaac accttggcca agaaaaaagt tctttcggg gaggaaatca
721 cggccggcggaa tgcaacagtc ttctctcaat tgccaactgt ctattatcca ttccgcaatc
781 acatttcgga tggctcgaa aaggacttcc caaagtattt ggagttactgt gaaagagttc
841 gtcataatggt ttacccaaag gactttacta tggtaattaa attgtcaaac tagtagtcag
901 atcaataaaa ttctacgtgg caaaaaaaaaaaa aaa
//

LOCUS AF071356 238 bp mRNA EST 30-JUN-1998
DEFINITION AF071356 mRNA from cadmium-responsive gene *Caenorhabditis elegans*
cDNA clone DDRT16, mRNA sequence.

ACCESSION AF071356

NID g3265101

KEYWORDS EST.

SOURCE *Caenorhabditis elegans*.

ORGANISM *Caenorhabditis elegans*

Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida;
Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; *Caenorhabditis*.

REFERENCE 1 (bases 1 to 238)

AUTHORS Freedman,J.H. and Liao,H.-C.

TITLE Cadmium-Regulated Genes from the Nematode *Caenorhabditis elegans*.
Identification and cloning of new cadmium-responsive genes by
differential display

JOURNAL Unpublished (1998)

COMMENT

Contact: Jonathan H. Freedman

Nicholas School of the Environment

Duke University

Box 90328, Durham, NC 27708-0328, USA

Email: jonf@duke.edu.

FEATURES Location/Qualifiers

source 1..238
/organism="Caenorhabditis elegans"
/strain="N2"
/db_xref="taxon:6239"
/clone="DDRT16"
/clone_lib="mRNA from cadmium-responsive gene"
/tissue_type="whole animal"
/dev_stage="mixed population"

BASE COUNT 77 a 42 c 45 g 74 t

ORIGIN

1 tttttttt ttggggagga aatcacggcg gcggtatcaa cagtcttctc tcaattggca
61 actgtctattt atccattccg caatcacattt tcggatgtc tggaaaagga ttcccaaaag
121 ttattggagt actgtgaaag agttcgatcat gaaggttacc caaaggactt tactatgtga

Fig. 5A-37

181 attaaatgt caaactagta gtcagatcaa taaaattcta cgtggcaaaa aaaaaaaaaa
//

LOCUS AF071355 248 bp mRNA EST 30-JUN-1998
DEFINITION AF071355 mRNA from cadmium-responsive gene *Caenorhabditis elegans*
cDNA clone DDRT15, mRNA sequence.
ACCESSION AF071355
NID g3265100
KEYWORDS EST.
SOURCE *Caenorhabditis elegans*.
ORGANISM *Caenorhabditis elegans*
Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida;
Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; *Caenorhabditis*.
REFERENCE 1 (bases 1 to 248)
AUTHORS Freedman,J.H. and Liao,H.-C.
TITLE Cadmium-Regulated Genes from the Nematode *Caenorhabditis elegans*.
Identification and cloning of new cadmium-responsive genes by
differential display
JOURNAL Unpublished (1998)
COMMENT
Contact: Jonathan H. Freedman
Nicholas School of the Environment
Duke University
Box 90328, Durham, NC 27708-0328, USA
Email: jonf@duke.edu.
FEATURES Location/Qualifiers
source 1..248
/organism="Caenorhabditis elegans"
/strain="N2"
/db_xref="taxon:6239"
/clone="DDRT15"
/clone_lib="mRNA from cadmium-responsive gene"
/tissue_type="whole animal"
/dev_stage="mixed population"
BASE COUNT 67 a 46 c 31 g 104 t
ORIGIN
1 tttttttt ttcgcatgt tgtaatacta atatttatta atttcttta atttctttt
61 ttaagttgt atttataggt tggagatt ttttgccctg taattttgc aactgtgattc
121 atgtatgtac tataatgaaacc gaaacccccc cccgtcataac acaacagttt gtaaaacatt
181 ttaatcccat atttctcatt cccaaacactc ttacaggtt tgcatcagca gcagcagtgc
241 aaacacaa
//

LOCUS AF071354 226 bp mRNA EST 30-JUN-1998
DEFINITION AF071354 mRNA from cadmium-responsive gene *Caenorhabditis elegans*
cDNA clone DDRT12, mRNA sequence.
ACCESSION AF071354
NID g3265099
KEYWORDS EST.
SOURCE *Caenorhabditis elegans*.
ORGANISM *Caenorhabditis elegans*
Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida;
Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; *Caenorhabditis*.
REFERENCE 1 (bases 1 to 226)

Fig. 5A-38

AUTHORS Freedman,J.H. and Liao,H.-C.

TITLE Cadmium-Regulated Genes from the Nematode *Caenorhabditis elegans*.

Identification and cloning of new cadmium-responsive genes by
differential display

JOURNAL Unpublished (1998)

COMMENT

Contact: Jonathan H. Freedman
Nicholas School of the Environment
Duke University
Box 90328, Durham, NC 27708-0328, USA
Email: jonf@duke.edu.

FEATURES Location/Qualifiers

source 1..226
/organism="Caenorhabditis elegans"
/strain="N2"
/db_xref="taxon:6239"
/clone="DDRT12"
/clone_lib="mRNA from cadmium-responsive gene"
/tissue_type="whole animal"
/dev_stage="mixed population"

BASE COUNT 68 a 38 c 35 g 85 t

ORIGIN

1 tttttttttttttttaaca aagaactgag cactctatgg tttatcaagt ctatatgtat
61 ccgtgtatgcc tactgtatcg tacatccatc tcgatcgtaa tgcatattt atcatgagtt
121 cccaaaggct ttaatcttga caaagggtca atagatataat atccttattt ggcactatat
181 atatgttcag aattatgact gatcgataca tatgtatcaa gttaca

//

LOCUS AF071353 212 bp mRNA EST 30-JUN-1998

DEFINITION AF071353 mRNA from cadmium-responsive gene *Caenorhabditis elegans*
cDNA clone DDRT10, mRNA sequence.

ACCESSION AF071353

NID g3265098

KEYWORDS EST.

SOURCE *Caenorhabditis elegans*.

ORGANISM *Caenorhabditis elegans*

Eukaryota; Metazoa; Nematoda; Secernentea; Rhabditia; Rhabditida;
Rhabditina; Rhabditoidea; Rhabditidae; Peloderinae; *Caenorhabditis*.

REFERENCE 1 (bases 1 to 212)

AUTHORS Freedman,J.H. and Liao,H.-C.

TITLE Cadmium-Regulated Genes from the Nematode *Caenorhabditis elegans*.

Identification and cloning of new cadmium-responsive genes by
differential display

JOURNAL Unpublished (1998)

COMMENT

Contact: Jonathan H. Freedman
Nicholas School of the Environment
Duke University
Box 90328, Durham, NC 27708-0328, USA
Email: jonf@duke.edu.

FEATURES Location/Qualifiers

source 1..212
/organism="Caenorhabditis elegans"
/strain="N2"

Fig. 5A-39

/db_xref="taxon:6239"
/clone="DDRT10"
/clone_lib="mRNA from cadmium-responsive gene"
/tissue_type="whole animal"
/dev_stage="mixed population"
BASE COUNT 68 a 35 c 34 g 75 t
ORIGIN
1 ttgcatacg gaactacatt tacatctgtt tcaacatatac aacaatacat aacatactca
61 atccttcagg ctctgaagga ttttgagtgc gatatactgt aacaagctcg ggaaacataa
121 gtacatttt tggagctatc ttttatgtt ggcctttct ttgtctctt tgaatgagtt
181 ttgaaatgaa ttgtctgtgc aaaaaaaaaa aa
//